

WHAT IS CLAIMED IS:

- A system for ablating solid material, comprising
- a laser generating ultra short pulses; and
  - a medium which conducts said ultra short pulses toward said solid material;
- wherein said ultra short pulses self focus in said medium to a power sufficient to ablate said solid material.
2. A system for ablating solid material, comprising:
- a laser generating ultra short pulses; and
  - a medium which conducts said ultra short pulses toward said solid material;
- wherein said ultra short pulses self trap in said medium at a power sufficient to ablate said solid material.
3. A method for ablating solid material, comprising:
- generating ultra short laser pulses; and
  - self focusing said ultra short laser pulses in a medium which conducts said ultra short pulses toward said solid material, to a power sufficient to ablate said solid material.
4. A method for ablating solid material, comprising:
- generating ultra short laser pulses; and
  - self trapping said ultra short laser pulses in a medium which conducts said ultra short pulses toward said solid material, at a power sufficient to ablate said solid material.